WHAT IS CLAIMED IS:

1   1.   A method of controlling a transmission rate, comprising:

2   determining whether a pause has been received;

3   determining whether a maximum of an inter-frame spacing (IFS) has been

4   reached if the pause has been received; and

5   increasing the inter-frame spacing by a value if the maximum of the inter-frame

6   spacing has not been reached to reduce the transmission rate.

1   2.   The method according to claim 1, wherein the value is based on a selection from

2   the group consisting of a pause time in a pause frame, a frequency of pause frames, and a

3   proximity of a current inter-frame spacing to the maximum or a minimum of the inter-frame

4   spacing.

1   3.   The method according to claim 1, wherein the value is in byte time units.

1   4.   A method of training a transmission rate, comprising:

2   determining whether a pause has been received;

3   determining whether a minimum of an inter-frame spacing (IFS) has been reached

4   if the pause has not been received; and

5   decreasing the inter-frame spacing by a value if the minimum of the inter-frame

6   spacing has not been reached to train the transmission rate.

1   5.   The method according to claim 4, further including waiting for an event to occur

2   prior to determining whether the pause has been received.

1   6.   The method according to claim 5, wherein the event is a packet count.

1   7.   The method according to claim 5, wherein the event is a poll time.

1   8.   The method according to claim 4, wherein the value is in byte time units.

1   9.   An input/output controller, comprising:

2   a receiver circuit to determine whether a pause has been received; and

3   a logic circuit adapted to determine whether a maximum of an inter-frame spacing

4   (IFS) has been reached if the pause has been received, and to increase the inter-frame

5   spacing by a value if the maximum of the inter-frame spacing has not been reached to

6   reduce a transmission rate.

1   10.   The input/output controller according to claim 9, wherein the value is based on a

2   selection from the group consisting of a pause time in a pause frame, a frequency of pause

3   frames, and a proximity of a current inter-frame spacing to the maximum or a minimum of the

4   inter-frame spacing.

1   11.   The input/output controller according to claim 9, wherein the value is in byte time

2   units.

1   12.   An input/output controller, comprising:

2   a receiver circuit to determine whether a pause has been received; and

3   a logic circuit adapted to determine whether a minimum of an inter-frame spacing

4   (IFS) has been reached if the pause has not been received, and to decrease the inter-frame

5   spacing by a value if the minimum of the inter-frame spacing has not been reached to

6   train a transmission rate.

1   13.   The input/output controller according to claim 12, wherein the logic circuit is

2   further adapted to wait for an event to occur prior to determining whether the pause has been

3   received by the receiver circuit.

1   14.   The input/output controller according to claim 13, wherein the event is a packet

2   count.

1   15.   The input/output controller according to claim 13, wherein the event is a poll

2   time.

1   16.   The input/output controller according to claim 12, wherein the value is in byte

2   time units.

1   17.   A program code storage device, comprising:

2   a machine-readable storage medium; and

3   machine-readable program code, stored on the machine-readable storage medium,

4   having instructions to

5   determine whether a pause has been received,

6   determine whether a maximum of an inter-frame spacing (IFS) has been

7   reached if the pause has been received, and

8   increase the inter-frame spacing by a value if the maximum of the inter-

9   frame spacing has not been reached to reduce a transmission rate.

1   18.   The program code storage device according to claim 17, wherein the value is

2 based on a selection from the group consisting of a pause time in a pause frame, a frequency of

3 pause frames, and a proximity of a current inter-frame spacing to the maximum or a minimum of

4 the inter-frame spacing.

1   19.   The program code storage device according to claim 17, wherein the value is in

2 byte time units.

1   20.   A program code storage device, comprising:

2   a machine-readable storage medium; and

3   machine-readable program code, stored on the machine-readable storage medium,

4   having instructions to

5   determine whether a pause has been received,

6   determine whether a minimum of an inter-frame spacing (IFS) has been

7   reached if the pause has not been received, and

8   decrease the inter-frame spacing by a value if the minimum of the inter-

9   frame spacing has not been reached to train a transmission rate.

1   21.   The program code storage device according to claim 20, wherein the machine-

2   readable program code further includes instructions to wait for an event to occur prior to

3   determining whether the pause has been received.

1   22.   The program code storage device according to claim 21, wherein the event is a

2   packet count.

1   23.   The program code storage device according to claim 21, wherein the event is a

2   poll time.

1   24.   The program code storage device according to claim 20, wherein the value is in

2   byte time units.

1   25.   A network system, comprising:

2   a controller system to determine whether a pause has been received, to determine

3   whether a maximum of an inter-frame spacing (IFS) has been reached if the pause has

4   been received, and to increase the inter-frame spacing by a value if the maximum of the

5   inter-frame spacing has not been reached to reduce a transmission rate; and

6   a trainer system to determine whether the pause has been received, to determine

7   whether a minimum of the inter-frame spacing has been reached if the pause has not been

8   received, and to decrease the inter-frame spacing by a second value if the minimum of the

9   inter-frame spacing has not been reached to train the transmission rate.

1   26.   The network system according to claim 25, wherein the value is in byte time

2   units.

1   27.   The network system according to claim 25, wherein the second value is in byte

2   time units.

1   28.   The network system according to claim 25, wherein the value is based on a

2   selection from the group consisting of a pause time in a pause frame, a frequency of pause

3   frames, and a proximity of a current inter-frame spacing to the maximum or the minimum of the

4   inter-frame spacing.